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FAIRCHILD SEMICONDUCTOR CORPORATION

UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF CALIFORNIA  
SAN FRANCISCO DIVISION

ALPHA & OMEGA SEMICONDUCTOR,  
LTD. and ALPHA & OMEGA  
SEMICONDUCTOR, INC.

Plaintiffs and Counterdefendants,

v.

FAIRCHILD SEMICONDUCTOR  
CORPORATION,

Defendant and Counterclaimant.

Case No. C 07-2638 JSW  
[Consolidated with Case No. C 07-2664 JSW]

**ANSWER TO FIRST AMENDED  
COMPLAINT FOR PATENT  
INFRINGEMENT AND DECLARATORY  
JUDGMENT; SECOND AMENDED  
COUNTERCLAIMS FOR PATENT  
INFRINGEMENT AND DECLARATORY  
JUDGMENT**

**JURY TRIAL DEMANDED**

AND CONSOLIDATED ACTION.

1 Defendant and counterclaimant Fairchild Semiconductor Corporation ("Fairchild"), by and  
2 through its attorneys, hereby answers the First Amended Complaint for Patent Infringement and  
3 Declaratory Judgment ("Complaint") of plaintiffs and counterdefendants Alpha & Omega  
4 Semiconductor, Ltd., ("AOS, Ltd.") and Alpha & Omega Semiconductor, Inc., ("AOS, Inc.")  
5 (collectively, "AOS") as follows:

#### 6 **PARTIES**

7 1. Fairchild is without sufficient knowledge or information to form a belief as to the truth  
8 or falsity of the allegations of paragraph 1 of the Complaint, and denies them on such basis.

9 2. Fairchild is without sufficient knowledge or information to form a belief as to the truth  
10 or falsity of the allegations of paragraph 2 of the Complaint, and denies them on such basis.

11 3. Fairchild admits that it is a Delaware corporation, with a place of business at 82  
12 Running Hill Road, South Portland, ME 04106.

#### 13 **JURISDICTION AND VENUE**

14 4. Fairchild admits that the Complaint purports to assert claims arising under the patent  
15 laws of the United States, 35 U.S.C. §§ 1 *et seq.* and the Declaratory Judgment Act, 28 U.S.C.  
16 §§ 2201 and 2202. Fairchild also admits this Court has subject matter jurisdiction over this action  
17 under 28 U.S.C. §§ Section 1331 and 1338(a). Except as so admitted, Fairchild denies the remaining  
18 allegations of paragraph 4 of the Complaint.

19 5. Fairchild admits that this Court has personal jurisdiction over Fairchild. Fairchild  
20 admits that it has facilities located in San Jose, California. Fairchild admits that it has communicated  
21 with AOS in California regarding AOS's business and Fairchild's patents, that it engaged in  
22 negotiations with AOS relating to Fairchild's patents, and that it has sued AOS for infringement of  
23 those patents in this Court. Except as so admitted, Fairchild denies the remaining allegations of  
24 paragraph 5 of the Complaint.

25 6. Fairchild admits that venue is proper in this judicial district.

#### 26 **INTRADISTRICT ASSIGNMENT**

27 7. Fairchild admits that this action is subject to assignment on a district-wide basis under  
28 the local rules of this Court and that the present action has now been assigned to the San Francisco

1 division.

## 2 **GENERAL ALLEGATIONS**

3 8. Fairchild is without sufficient knowledge or information to form a belief as to the truth  
4 or falsity of the allegations of paragraph 8 of the Complaint, and denies them on such basis.

5 9. Fairchild admits that the face of U.S. Patent No. 5,907,776 ("the '776 patent"), entitled  
6 "Method of Forming a Semiconductor Structure Having Reduced Threshold Voltage and High Punch-  
7 through Tolerance," states that it was issued on May 25, 1999. Fairchild also admits that the face of  
8 U.S. Patent No. 5,767,567 ("the '567 patent"), entitled "Design of Device Layout for Integration with  
9 Power MOSFET Packaging to Achieve Better Lead Wire Connections and Lower On Resistance,"  
10 states that it was issued on June 16, 1998. Fairchild also admits that the face of U.S. Patent No.  
11 5,930,630 ("the '630 patent"), entitled "Method for Device Ruggedness Improvement and On-  
12 resistance Reduction for Power MOSFET Achieved by Novel Source Contact Structure," states that it  
13 was issued on July 27, 1999. Except as so admitted, Fairchild is without sufficient knowledge or  
14 information to form a belief as to the truth or falsity of the remaining allegations of paragraph 9 of the  
15 Complaint, and denies them on such basis.

16 10. Fairchild is without sufficient knowledge or information to form a belief as to the truth  
17 or falsity of the allegations of paragraph 10 of the Complaint, and denies them on such basis.

18 11. Fairchild admits the allegations of paragraph 11 of the Complaint.

19 12. Fairchild admits the allegations of paragraph 12 of the Complaint.

20 13. Fairchild admits that AOS's complaint denies that AOS infringes any valid and  
21 enforceable claim of any of the Fairchild patents, but Fairchild denies the basis for AOS's denial.

22 14. Fairchild admits that AOS's Complaint seeks a declaratory judgment that the claims of  
23 the '481, '406, '497, and '195 patents are invalid and that AOS does not infringe any valid claim of  
24 certain of the '481, '406, '497, and '195 patents.

## 25 **FIRST CLAIM FOR RELIEF**

### 26 **(Alleged Infringement of U.S. Patent No. 5,907,776 by Fairchild)**

27 15. Fairchild incorporates herein by reference its responses to paragraphs 1 through 10 of  
28 the Complaint.

1 16. Fairchild denies each and every allegation of paragraph 16 of the Complaint.

2 17. Fairchild denies each and every allegation of paragraph 17 of the Complaint.

3 18. Fairchild denies each and every allegation of paragraph 18 of the Complaint.

4 19. Fairchild denies each and every allegation of paragraph 19 of the Complaint.

5 **SECOND CLAIM FOR RELIEF**  
6 **(Alleged Infringement of U.S. Patent No. 5,767,567 by Fairchild)**

7 20. Fairchild incorporates herein by reference its responses to paragraphs 1 through 10 of  
8 the Complaint.

9 21. Fairchild denies each and every allegation of paragraph 21 of the Complaint.

10 22. Fairchild denies each and every allegation of paragraph 22 of the Complaint.

11 23. Fairchild denies each and every allegation of paragraph 23 of the Complaint.

12 24. Fairchild denies each and every allegation of paragraph 24 of the Complaint.

13 **THIRD CLAIM FOR RELIEF**  
14 **(Alleged Infringement of U.S. Patent No. 5,930,630 by Fairchild)**

15 25. Fairchild incorporates herein by reference its responses to paragraphs 1 through 10 of  
16 the Complaint.

17 26. Fairchild denies each and every allegation of paragraph 26 of the Complaint.

18 27. Fairchild denies each and every allegation of paragraph 27 of the Complaint.

19 28. Fairchild denies each and every allegation of paragraph 28 of the Complaint.

20 29. Fairchild denies each and every allegation of paragraph 29 of the Complaint.

21 **FOURTH CLAIM FOR RELIEF**  
22 **(Alleged Non-Infringement of U.S. Patent No. 6,429,481)**

23 30. Fairchild incorporates herein by reference its responses to paragraphs 1 through 14 of  
24 the Complaint.

25 31. Fairchild denies each and every allegation of paragraph 31 of the Complaint.

26 32. Fairchild admits that, as alleged in paragraph 32 of the Complaint, AOS seeks a judicial  
27 determination from this Court that it has not willfully or otherwise infringed, contributed to the  
28 infringement of, or actively induced others to infringe, and does not willfully or otherwise infringe,

1 contribute to the infringement of, or actively induce others to infringe any valid and enforceable claim  
2 of the '481 patent as properly construed, but Fairchild denies the existence of any basis for such a  
3 judicial determination.

4 **FIFTH CLAIM FOR RELIEF**  
5 **(Alleged Invalidity of U.S. Patent No. 6,429,481)**

6 33. Fairchild incorporates herein by reference its responses to paragraphs 1 through 14 and  
7 30 through 32 of the Complaint.

8 34. Fairchild denies each and every allegation of paragraph 34 of the Complaint.

9 35. Fairchild admits that, as alleged in paragraph 35 of the Complaint, AOS seeks a judicial  
10 determination from this Court that the claims of the '481 patent are invalid, but Fairchild denies the  
11 existence of any basis for such a judicial determination.

12 **SIXTH CLAIM FOR RELIEF**  
13 **(Alleged Non-Infringement of U.S. Patent No. 6,710,406)**

14 36. Fairchild incorporates herein by reference its responses to paragraphs 1 through 14 and  
15 30 through 35 of the Complaint.

16 37. Fairchild denies each and every allegation of paragraph 37 of the Complaint.

17 38. Fairchild admits that, as alleged in paragraph 38 of the Complaint, AOS seeks a judicial  
18 determination from this Court that it has not willfully or otherwise infringed, contributed to the  
19 infringement of, or actively induced others to infringe, and does not willfully or otherwise infringe,  
20 contribute to the infringement of, or actively induce others to infringe any valid and enforceable claim  
21 of the '406 patent as properly construed, but Fairchild denies the existence of any basis for such a  
22 judicial determination .

23 **SEVENTH CLAIM FOR RELIEF**  
24 **(Alleged Invalidity of U.S. Patent No. 6,710,406)**

25 39. Fairchild incorporates herein by reference its responses to paragraphs 1 through 14 and  
26 30 through 38 of the Complaint.

27 40. Fairchild denies each and every allegation of paragraph 40 of the Complaint.

28 41. Fairchild admits that, as alleged in paragraph 41 of the Complaint, AOS seeks a judicial

1 determination from this Court that the claims of the '406 patent are invalid, but Fairchild denies the  
2 existence of any basis for such a judicial determination .

3 **EIGHTH CLAIM FOR RELIEF**  
4 **(Alleged Non-Infringement of U.S. Patent No. 6,521,497)**

5 42. Fairchild incorporates herein by reference its responses to paragraphs 1 through 14 and  
6 30 through 41 of the Complaint.

7 43. Fairchild denies each and every allegation of paragraph 43 of the Complaint.

8 44. Fairchild admits that, as alleged in paragraph 44 of the Complaint, AOS seeks a judicial  
9 determination from this Court that it has not willfully or otherwise infringed, contributed to the  
10 infringement of, or actively induced others to infringe, and does not willfully or otherwise infringe,  
11 contribute to the infringement of, or actively induce others to infringe any valid and enforceable claim  
12 of the '497 patent as properly construed, but Fairchild denies the existence of any basis for such a  
13 judicial determination .

14 **NINTH CLAIM FOR RELIEF**  
15 **(Alleged Invalidity of U.S. Patent No. 6,521,497)**

16 45. Fairchild incorporates herein by reference its responses to paragraphs 1 through 14 and  
17 30 through 44 of the Complaint.

18 46. Fairchild denies each and every allegation of paragraph 46 of the Complaint.

19 47. Fairchild admits that, as alleged in paragraph 47 of the Complaint, AOS seeks a judicial  
20 determination from this Court that the claims of the '497 patent are invalid, but Fairchild denies the  
21 existence of any basis for such a judicial determination.

22 **TENTH CLAIM FOR RELIEF**  
23 **(Alleged Non-Infringement of U.S. Patent No. 6,828,195)**

24 48. Fairchild incorporates herein by reference its responses to paragraphs 1 through 14 and  
25 30 through 47 of the Complaint.

26 49. Fairchild denies each and every allegation of paragraph 49 of the Complaint.

27 50. Fairchild admits that, as alleged in paragraph 50 of the Complaint, AOS seeks a judicial  
28 determination from this Court that it has not willfully or otherwise infringed, contributed to the

1 infringement of, or actively induced others to infringe, and does not willfully or otherwise infringe,  
 2 contribute to the infringement of, or actively induce others to infringe any valid and enforceable claim  
 3 of the '195 patent as properly construed, but Fairchild denies the existence of any basis for such a  
 4 judicial determination.

5 **ELEVENTH CLAIM FOR RELIEF**  
 6 **(Alleged Invalidity of U.S. Patent No. 6,828,195)**

7 51. Fairchild incorporates herein by reference its responses to paragraphs 1 through 14 and  
 8 30 through 50 of the Complaint.

9 52. Fairchild denies each and every allegation of paragraph 52 of the Complaint.

10 53. Fairchild admits that, as alleged in paragraph 53 of the Complaint, AOS seeks a judicial  
 11 determination from this Court that the claims of the '195 patent are invalid, but Fairchild denies the  
 12 existence of any basis for such a judicial determination.

13  
 14 **AFFIRMATIVE DEFENSES**

15 Fairchild, for its further and separate defenses to the allegations of the Complaint, alleges as  
 16 follows:

17 **FIRST AFFIRMATIVE DEFENSE**

18 54. The Complaint fails to state a claim upon which relief can be granted.

19 **SECOND AFFIRMATIVE DEFENSE**

20 55. Each of the claims of the '776, '567, and '630 patents are invalid for failure to meet one  
 21 or more of the conditions of patentability specified in Title 35 of the United States Code, including but  
 22 not limited to 35 U.S.C. §§ 102, 103, 112, and/or 115.

23 **THIRD AFFIRMATIVE DEFENSE**

24 56. AOS's claim for relief is barred by the doctrine of prosecution history estoppel.

25 **FOURTH AFFIRMATIVE DEFENSE**

26 57. AOS's claim for damages is barred, in whole or in part, by the operation of applicable  
 27 statutes, including 35 U.S.C. § 287.

28 ///

**FIFTH AFFIRMATIVE DEFENSE**

58. AOS's claim for relief is barred by the doctrine of equitable estoppel.

**SIXTH AFFIRMATIVE DEFENSE**

59. AOS's claim for relief is barred by the doctrine of laches.

**SEVENTH AFFIRMATIVE DEFENSE**

60. AOS's claim for infringement of the '776 patent is barred because the '776 patent is unenforceable, as the applicants engaged in inequitable conduct before the United States Patent and Trademark Office (the "Patent Office").

61. The '776 patent states that its application was filed with the Patent Office on July 11, 1997, and its date of issuance was May 25, 1999. On information and belief, Fwu-Iuan Hshieh ("Hshieh") was the President of MegaMOS Corporation, to which the '776 patent was assigned, during the prosecution of the '776 patent.

62. Hshieh is listed as a named inventor of the '776 patent and was subject to the duty to disclose information material to patentability under 37 C.F.R. 1.56. During the prosecution of the patent application that led to issuance of the '776 patent, no Information Disclosure Statement was submitted to the Patent Office by Mr. Hshieh or by any other person. Accordingly, neither Hshieh nor any other person disclosed any prior art to the Patent Office during the prosecution of the '776 patent. Similarly, Hshieh is listed as a named inventor of the '630 patent and was subject to the duty to disclose information material to patentability under 37 C.F.R. 1.56. During the prosecution of the patent application that led to issuance of the '630 patent, no Information Disclosure Statement was submitted by Hshieh or by any other person. Accordingly, neither Hshieh nor any other person disclosed any prior art to the Patent Office during the prosecution of the '630 patent.

63. U.S. Patent No. 5,341,011 ("the '011 patent"), entitled "Short Channel Trenched DMOS Transistor" issued on August 23, 1994, and lists Fwu-Iuan Hshieh as a named inventor. U.S. Patent No. 5,474,943 ("the '943 patent"), entitled "Method for Fabricating a Short Channel Trenched DMOS Transistor," issued on December 12, 1995, and lists Fwu-Iuan Hshieh as a named inventor. U.S. Patent No. 5,821,583 ("the '583 patent"), entitled "Trenched DMOS Transistor with Lightly Doped Tub," issued on October 13, 1998, and lists Fwu-Iuan Hshieh as a named inventor. On information



1 and belief, the Fwu-Iuan Hshieh listed as a named inventor on each of the '011, '943 and '583 patents  
2 is the same Fwu-Iuan Hshieh listed as a named inventor on the '776 patent.

3 64. Each of the '011, '943 and '583 patents were issued prior to the issuance of the '776  
4 patent and each is highly material to the patentability of the inventions claimed by the '776 patent. As  
5 a named inventor on each of these patents, Hshieh necessarily knew of the existence of each of these  
6 patents and of their materiality to the examination of the '776 patent, yet Hshieh did not disclose any  
7 of them to the Patent Office.

8 65. On information and belief, the inventors of the inventions claimed by the '776 patent  
9 knowingly and willfully failed to disclose the existence of this prior art to the Patent Office with intent  
10 to deceive in violation of their duty of candor. Consequently, in light of this inequitable conduct, the  
11 '776 patent is unenforceable.

## 12 13 COUNTERCLAIMS FOR DECLARATORY JUDGMENT

### 14 JURISDICTION AND VENUE

15 1. These counterclaims are brought under the patent laws of the United States, Title 35 of  
16 the United States Code. This Court has subject matter jurisdiction over this action pursuant to 28  
17 U.S.C. §§ 1331 (Federal Question), 1338(a) (Patents), 2201 (Declaratory Relief), and 2202  
18 (Declaratory Relief).

19 2. Venue is proper in this judicial district under 28 U.S.C. §§ 1391 and 1400.

20 3. This court has personal jurisdiction over AOS because AOS has availed itself of the  
21 jurisdiction of the Court by filing its Complaint. AOS also has sufficient minimum contacts with this  
22 State, maintains offices within this State and, on information and belief, conducts substantial business  
23 within this State.

### 24 PARTIES

25 4. Fairchild Semiconductor Corporation is a corporation duly organized and existing  
26 under the laws of the State of Delaware and has a place of business in San Jose, California.

27 5. On information and belief, Alpha and Omega Semiconductor Incorporated is a  
28 corporation organized and existing under the laws of the State of California and has a place of

business in Sunnyvale, California. On information and belief, Alpha and Omega Semiconductor Limited is a Bermuda corporation with a place of business in Taipei, Taiwan.

**FIRST COUNTERCLAIM**  
**(Declaratory Judgment of Non-Infringement)**

6. Fairchild incorporates by reference the allegations of Paragraphs 1 through 5, as if fully set forth herein.

7. AOS purports to be the owner by assignment of the '776, '567, and '630 patents.

8. An actual and justiciable case or controversy exists between Fairchild, on the one hand, and AOS, on the other hand, as to Fairchild's alleged infringement of the '776, '567, and '630 patents by virtue of the allegations in the Complaint in this action.

9. Fairchild has not willfully or otherwise infringed, contributed to the infringement of, or actively induced others to infringe, and does not willfully or otherwise infringe, contribute to the infringement of, or actively induce others to infringe, any valid claim of the '776, '567, and '630 patents.

10. Fairchild seeks a judicial determination from this Court that it has not willfully or otherwise infringed, contributed to the infringement of, or actively induced others to infringe, and does not willfully or otherwise infringe, contribute to the infringement of, or actively induce others to infringe, any valid claim of the '776, '567, and '630 patents.

**SECOND COUNTERCLAIM**  
**(Declaratory Judgment of Invalidity)**

11. Fairchild incorporates by reference the allegations of paragraphs 1 through 9, as if fully set forth herein.

12. An actual and justiciable case or controversy exists between Fairchild, on the one hand, and AOS, on the other hand, as to the validity of the claims of the '776, '567, and '630 patents by virtue of the allegations in the Complaint in this action.

13. Each of the claims of the '776, '567, and '630 patents are invalid for failure to meet one or more of the conditions of patentability specified in Title 35 of the United States Code, including but not limited to 35 U.S.C. §§ 101, 102, 103, and/or 112.



21. On March 23, 2004, United States Patent No. 6,710,406 ("the '406 patent"), entitled "Field Effect Transistor and Method of its Manufacture," was duly and legally issued by the United States Patent and Trademark Office. Fairchild is the assignee of the '406 patent and continues to hold all rights and interest in the '406 patent. A true and correct copy of the '406 patent is attached hereto as Exhibit B.

22. AOS has directly, indirectly, contributorily, and/or by inducement infringed and continues to infringe the '406 patent by its manufacture, use, sale, importation, and/or offer for sale of certain products, including without limitation, AOS power transistors. AOS is liable for its infringement of the '406 patent pursuant to 35 U.S.C. § 271.

23. AOS's acts of infringement have caused damage to Fairchild, and Fairchild is entitled to recover from AOS the damages sustained as a result of AOS's wrongful acts in an amount subject to proof at trial. AOS's infringement of Fairchild's exclusive rights under the '406 patent will continue to cause damage to Fairchild, causing irreparable harm for which there is no adequate remedy at law unless enjoined by this Court.

24. Upon information and belief, AOS's infringement of the '406 patent is willful and deliberate, entitling Fairchild to increased damages under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

**FIFTH COUNTERCLAIM  
(Infringement of U.S. Patent No. 6,521,497)**

25. Fairchild incorporates by reference the allegations of paragraphs 1 through 5, as if fully set forth herein.

26. On February 18, 2003, United States Patent No. 6,521,497 ("the '497 patent"), entitled "Method of Manufacturing a Field Effect Transistor," was duly and legally issued by the United States Patent and Trademark Office. Fairchild is the assignee of the '497 patent and continues to hold all rights and interest in the '497 patent. A true and correct copy of the '497 patent is attached hereto as Exhibit C.

27. AOS has directly, indirectly, contributorily, and/or by inducement infringed and continues to infringe the '497 patent by its manufacture, use, sale, importation, and/or offer for sale of

1 certain products, including without limitation, AOS power transistors. AOS is liable for its  
2 infringement of the '497 patent pursuant to 35 U.S.C. § 271.

3 28. AOS's acts of infringement have caused damage to Fairchild, and Fairchild is entitled  
4 to recover from AOS the damages sustained as a result of AOS's wrongful acts in an amount subject to  
5 proof at trial. AOS's infringement of Fairchild's exclusive rights under the '497 patent will continue to  
6 cause damage to Fairchild, causing irreparable harm for which there is no adequate remedy at law  
7 unless enjoined by this Court.

8 29. Upon information and belief, AOS's infringement of the '497 patent is willful and  
9 deliberate, entitling Fairchild to increased damages under 35 U.S.C. § 284 and to attorneys' fees and  
10 costs incurred in prosecuting this action under 35 U.S.C. § 285.

11 **SIXTH COUNTERCLAIM**  
12 **(Infringement of U.S. Patent No. 6,828,195)**

13 30. Fairchild incorporates by reference the allegations of paragraphs 1 through 5, as if fully  
14 set forth herein.

15 31. On December 7, 2004, United States Patent No. 6,828,195 ("the '195 patent"), entitled  
16 "Method of Manufacturing a Trench Transistor Having a Heavy Body Region," was duly and legally  
17 issued by the United States Patent and Trademark Office. Fairchild is the assignee of the '195 patent  
18 and continues to hold all rights and interest in the '195 patent. A true and correct copy of the '195  
19 patent is attached hereto as Exhibit D.

20 32. AOS has directly, indirectly, contributorily, and/or by inducement infringed and  
21 continues to infringe the '195 patent by its manufacture, use, sale, importation, and/or offer for sale of  
22 certain products, including without limitation, AOS power transistors. AOS is liable for its  
23 infringement of the '195 patent pursuant to 35 U.S.C. § 271.

24 33. AOS's acts of infringement have caused damage to Fairchild, and Fairchild is entitled  
25 to recover from AOS the damages sustained as a result of AOS's wrongful acts in an amount subject to  
26 proof at trial. AOS's infringement of Fairchild's exclusive rights under the '195 patent will continue to  
27 cause damage to Fairchild, causing irreparable harm for which there is no adequate remedy at law  
28 unless enjoined by this Court.

34. Upon information and belief, AOS's infringement of the '195 patent is willful and deliberate, entitling Fairchild to increased damages under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

**SEVENTH COUNTERCLAIM**  
**(Infringement of U.S. Patent No. 7,148,111)**

35. Fairchild incorporates by reference the allegations of paragraphs 1 through 5, as if fully set forth herein.

36. On December 12, 2006, United States Patent No. 7,148,111 ("the '111 patent"), entitled "Method of Manufacturing a Trench Transistor Having a Heavy Body Region," was duly and legally issued by the United States Patent and Trademark Office. Fairchild is the assignee of the '111 patent and continues to hold all rights and interest in the '111 patent. A true and correct copy of the '111 patent is attached hereto as Exhibit E.

37. AOS has directly, indirectly, contributorily, and/or by inducement infringed and continues to infringe the '111 patent by its manufacture, use, sale, importation, and/or offer for sale of certain products, including without limitation, AOS power transistors. AOS is liable for its infringement of the '111 patent pursuant to 35 U.S.C. § 271.

38. AOS's acts of infringement have caused damage to Fairchild, and Fairchild is entitled to recover from AOS the damages sustained as a result of AOS's wrongful acts in an amount subject to proof at trial. AOS's infringement of Fairchild's exclusive rights under the '111 patent will continue to cause damage to Fairchild, causing irreparable harm for which there is no adequate remedy at law unless enjoined by this Court.

39. Upon information and belief, AOS's infringement of the '111 patent is willful and deliberate, entitling Fairchild to increased damages under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

**EIGHTH COUNTERCLAIM**  
**(Infringement of U.S. Patent No. 6,818,947)**

40. Fairchild incorporates by reference the allegations of paragraphs 1 through 5, as if fully set forth herein.

41. On November 16, 2004, United States Patent No. 6,818,947 ("the '947 patent"), entitled "Buried State-Field Termination Structure," was duly and legally issued by the United States Patent and Trademark Office. Fairchild is the assignee of the '947 patent and continues to hold all rights and interest in the '947 patent. A true and correct copy of the '947 patent is attached hereto as Exhibit F.

42. AOS has directly, indirectly, contributorily, and/or by inducement infringed and continues to infringe the '947 patent by its manufacture, use, sale, importation, and/or offer for sale of certain products, including without limitation, AOS power transistors. AOS is liable for its infringement of the '947 patent pursuant to 35 U.S.C. § 271.

43. AOS's acts of infringement have caused damage to Fairchild, and Fairchild is entitled to recover from AOS the damages sustained as a result of AOS's wrongful acts in an amount subject to proof at trial. AOS's infringement of Fairchild's exclusive rights under the '947 patent will continue to cause damage to Fairchild, causing irreparable harm for which there is no adequate remedy at law unless enjoined by this Court.

44. Upon information and belief, AOS's infringement of the '947 patent is willful and deliberate, entitling Fairchild to increased damages under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

**NINTH COUNTERCLAIM**  
**(Declaratory Judgment of Unenforceability of U.S. Patent No. 5,907,776**  
**due to Inequitable Conduct)**

45. Fairchild incorporates by reference the allegations of paragraphs 1 through 9, as if fully set forth herein.

46. An actual and justiciable case or controversy requiring declaratory relief now exists between Fairchild, on the one hand, and AOS, on the other hand, as to the enforceability of the '776 patent.

47. The '776 patent and the claims contained therein are unenforceable based upon inequitable conduct during prosecution, as alleged above in paragraphs 60-65 of the Answer regarding Fairchild's Seventh Affirmative Defense.

48. Fairchild seeks a judicial determination from this Court that the '776 patent and the claims contained therein are unenforceable.

**PRAYER FOR RELIEF**

WHEREFORE, Fairchild requests entry of judgment in its favor and against AOS as follows:

A. That the claims of AOS alleged in its Complaint be denied in their entirety and that AOS take nothing by way of its Complaint;

B. A declaration that Fairchild has not willfully or otherwise infringed, contributed to the infringement of, or actively induced others to infringe, and does not willfully or otherwise infringe, contribute to the infringement of, or actively induce others to infringe, any valid claim of the '776, '567, and '630 patents;

C. A declaration that the claims of the '776, '567, and '630 patents are invalid;

D. A declaration that the '776 patent and the claims contained therein are unenforceable due to inequitable conduct;

E. A judgment that AOS has infringed, and is infringing, the '481, '406, '497, '195, '111, and '947 patents;

F. A permanent injunction enjoining AOS and its respective officers, agents, employees, subsidiaries, and those acting in privity or concert with AOS, including related individuals and entities, customers, representatives, dealers, and distributors, from further infringement, contributory infringement and/or inducement of infringement of the '481, '406, '497, '195, '111, and '947 patents;

G. An award of damages arising out of AOS's infringement of the '481, '406, '497, '195, '111, and '947 patents, including enhanced damages pursuant to 35 U.S.C. §284, together with prejudgment and post-judgment interest, in an amount according to proof;

H. A declaration that this case is an exceptional case within the meaning of 35 U.S.C. § 285 and an award of reasonable attorneys' fees to Fairchild; and

I. Costs of suit and such other and further relief as the Court deems just and proper.

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1 DATED: October 18, 2007

Respectfully submitted,

3 By: /s/Eric P. Jacobs

Eric P. Jacobs

Peter H. Goldsmith

Robert A. McFarlane

Igor Shoiket

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FAIRCHILD SEMICONDUCTOR CORPORATION

61185252 v1

**JURY DEMAND**

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Fairchild demands a trial by jury on all issues so triable.

DATED: October 18, 2007

Respectfully submitted,

By: /s/Eric P. Jacobs

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